

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application.

Please amend the claims to read as set forth below.

1. (Currently Amended) A method for recording ~~the a~~ boiling curve of liquids, in particular petroleum products and/or solvents, in which a sample amount of the liquid to be analyzed is evaporated and subsequently condensed, wherein ~~the a~~ vapor temperature and the respectively evaporated amount of liquid are monitored, ~~characterized in that~~ wherein the sample amount is dosed by a filling means, particularly a pump, that the filling means and ~~the a~~ condensate collection chamber are brought to a defined, and preferably identical, temperature level, and that ~~the a~~ condensed volume is determined volumetrically in a manner known per se and ~~the a~~ distillation residue of the sample amount is determined by weighing.

2. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein the sample amount is pumped into a sample dish which is moved by the aid of a lifting drive into a gas-tight connection with ~~the a~~ distillation apparatus and pressed at the same.

3. (Currently Amended) A method according to claim 1 ~~or 2~~, characterized in that wherein the filling means for the dosing of the sample amount, after completion of the measuring procedure, via at least one valve is switched to remove the condensate by suction.

4. (Currently Amended) A method according to claim 1, 2 or 3, characterized in that 2, wherein the sample dish is discarded after one-time use.

5. (Currently Amended) A method according to ~~any one of claims 1 to 4~~, characterized in that claim 1, wherein the sample is used in an amount of from 1 to 12 ml, preferably about 6 ml, that the a distillation rate is chosen such that the time between the onset of boiling and the end of boiling is less than 15 minutes, and that the distillation residue determined by weighing is converted to volume.

6. (Currently Amended) A device for carrying out the method according to ~~any one of claims 1 to 5~~, characterized in that a claim 1, wherein the filling means (1), particularly a pump, for filling in a sample amount is connected with a duct leading to a sample dish (7), that the sample dish (7) is

connected with a distillation apparatus, particularly a condenser (15), that the filling means and the distillation apparatus, particularly the condenser (15), are made of well heat-conducting material, particularly metal, and that the filling means (1) and the condenser (15) are connected to a temperature controller.

7. (Currently Amended) A device according to claim 6, ~~characterized in that~~ wherein the sample dish (7) is arranged on a movable support (8), which is connected with an adjustment drive (9), by which ~~the~~ an edge of the sample dish (7) can be pressed at ~~the~~ an edge of the connection opening of a distillation column (10) that follows the sample dish (7).

8. (Currently Amended) A device according to claim 6 ~~or 7~~, ~~characterized in that~~ wherein the temperature controller is designed as an electric cooler and/or heater using, in particular, Peltier elements (5, 17).

9. (Currently Amended) A device according to ~~any one of claims 6 to 8, characterized in that claim~~
6, wherein the filling means (1) and the distillation apparatus are arranged in a common portable
housing.

10. (Currently Amended) A device according to ~~any one of claims 6 to 9, characterized in that claim~~
6, wherein temperature sensors (6, 16) are provided in both the filling means (1) and the condenser
(15).

11. (Currently Amended) A device according to ~~any one of claims 6 to 10, characterized in that~~
claim 7, wherein the adjustment drive (9) for the sample dish (7) is designed as a geared motor.

12. (Currently Amended) A device according to ~~any one of claims 6 to 11, characterized in that~~
claim 7, wherein the edge of the sample dish (7) and the edge of the connection opening of the
distillation column (10) are designed to be conical, hollow-conical or ball-shaped, so as to ensure
the gas-tight connection of the sample dish (7) with the distillation apparatus while applying the
pressing pressure created by the adjustment drive (9).

13. (Currently Amended) A device according to ~~any one of claims 6 to 12, characterized in that~~ claim 7, wherein the distillation column (10) is surrounded by an insulation means (12).

14. (Currently Amended) A device according to ~~any one of claims 6 to 13, characterized in that~~ claim 6, wherein the condenser (15) comprises an axial zone with reduced diameter of a material transparent to light and, in particular, infrared light, particularly glass, which is followed by a zone having a larger clear width adapted to receive an axially movable piston (22).

15. (Currently Amended) A device according to ~~any one of claims 6 to 14, characterized in that~~ claim 6, wherein the axially movable piston (22) is connected with an adjustment drive, particularly a stepper motor or geared motor including a rotary encoder (23), which is actuatable as a function of the signals transmitted by an optical detector (21).

16. (Currently Amended) A device according to ~~any one of claims 6 to 15, characterized in that~~ claim 14, wherein an optical signal transmitter (20) is arranged in the region of the axial zone of light-transparent material and designed for the detection of the meniscus of the condensed liquid,

and that the adjustment drive of the piston (22) is actuatable for the correction of the position of the meniscus.

17. (Currently Amended) A device according to ~~any one of claims 6 to 16, characterized in that~~ claim 6, wherein the distillation apparatus is made of special steel, brass or titanium, and the sample dish (7) is made of metal, preferably aluminum or copper.

18. (Currently Amended) A device according to ~~any one of claims 6 to 17, characterized in that~~ claim 6, wherein a pressure sensor, particularly a piezoresistive pressure sensor, is provided for the determination of the air pressure, and that the distillation apparatus in the region of the condenser (15) is designed with an open connection to the atmosphere.

19. (Currently Amended) A device according to ~~any one of claims 6 to 18, characterized in that~~ claim 6, wherein a weighing means designed for the weighing of the distillation residue of the sample amount is arranged within the housing.

20. (Currently Amended) A device according to ~~any one of claims 6 to 19~~, characterized in that the claim 6, wherein measuring values are fed via lines to a microprocessor designed for the evaluation and calculation of measuring results, and that a display or output means for the measuring results is provided.